



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,886	06/29/2001	Collin P. Galloway	00066CON	1023

7590 10/06/2004

Michelle B. Lando, Esq.
CABOT CORPORATION
Law Department
157 Concord Road
Billerica, MA 01821

EXAMINER

HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/896,886	GALLOWAY ET AL.	
	Examiner	Art Unit	
	Cynthia Hamilton	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24,27-42,44-48,50-52 and 54-110 is/are pending in the application.
- 4a) Of the above claim(s) 91-110 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 56-73 is/are allowed.
- 6) ☒ Claim(s) 1-24,27-42,44-48,50-52,54,55,74,76,79,81 and 82 is/are rejected.
- 7) ☒ Claim(s) 75,77,78 and 80 is/are objected to.
- 8) ☒ Claim(s) 1-24,27-42,44-48,50-52 and 54-110 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The examiner removes the objection to the amendment to the specification in view of applicant's showing as to the meaning of Arquad and "quaternary ammonium compound".
2. The examiner removes rejections under 35 USC 112, second paragraph, of claims 58-64 and 67-71 due to applicants' amendment to the claims of "an additional polymer" to replace "further comprising a polymer". This amendment alone removes the issue. The examiner does not address the other arguments of record to why "further comprising a polymer" is clear language since this phrase is no longer part of the claim language under examination.
3. Applicants in their response of July 20, 2004 have alleged with respect to all rejections based upon Johnson et al (US 6,336,965) the following:

"Since Johnson et al and the present application are owned by the same assignee, namely Cabot Corporation, 35 USC 103 (c) applies and therefore, this rejection is not proper. Copies of the recorded Assignments for the respective applications are attached for the Examiner's convenience."

The examiner responds that Johnson et al (US 6,336,965) remains a reference because applicants failed to met the requirements of 35 USC 103 (c) because they have failed to make a statement that Johnson et al (US 6,336,965) and the instant application *were commonly owned or assigned at the time the instant application was made*. The filing date of the instant application is June 29, 2001. The Assignment of this application in August 2001 does not show that at the time of filing this application was commonly owned or assigned with Johnson et al (US 6,336,965). Johnson et al (US 6,336,965) remains prior art to this application under 35 USC 103 (c). The following from MPEP 701.02(l)(1) sets forth:

The following statement is sufficient evidence to establish common ownership of, or an obligation for assignment to, the same person(s) or organizations(s):

Applications and references (whether patents, patent applications, patent application publications, etc.) will be considered by the examiner to be owned by, or subject to an obligation of assignment to the same person, at the time the invention was made, if the applicant(s) or an attorney or agent of record makes a statement to the effect that the application and the reference were, at the time the invention was made, owned by, or subject to an obligation of assignment to, the same person.

See "Guidelines Setting Forth a Modified Policy Concerning the Evidence of Common Ownership, or an Obligation of Assignment to the Same Person, as Required by 35 U.S.C. 103(c)," 1241 O.G. 96 (December 26, 2000). The applicant(s) or the repre-

Thus, such a statement would be sufficient to remove Johnson et al (US 6,336,965) as a reference under 35 USC 103 (c). The examiner found no such statement in applicant's reply of July 20, 2004.

4. Claims 41-42, 44-45, 46-48, 52, and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (WO 99/51690) as evidenced by Grabley et al (WO 98/31550). Johnson et al in Example 15, pages 27-28 and Example 2, page 19 in the making of 2E make a printing plate that has all but the instant "polymer" of claims 41-42, 44-45. However, on page

Art Unit: 1752

13-14, Johnson et al teach using a much broader group of materials for their printing plates. The references fully incorporated into Johnson et al include WO98/31550 that is Grabley et al.

Grabley et al in Example 6 teach using a pigment mixed with a polyacrylate resin in the radiation absorbing layer and on page 5 other acrylate ester resins as well as (meth)acrylic acid resin are listed as binders for the radiation absorbing pigment layers used in the printing plates set forth. Since Grabley et al is completely incorporated by Johnson et al then the plates of Grabley et al wherein the modified pigments of Johnson et al are used instead of those disclosed Grabley et al make prima facie obvious applicants' printing plates of claims 41-42, 44-45 because Johnson et al teaches their use together. Wherein the pigments of Johnson et al from page 5, lines 25 to page 6, lines 34, and polymeric groups of acrylic polymers are used to modify the pigments, the printing plates of Johnson et al make prima facie obvious applicants' plates of claims 41-42, 44-45, 46-48, 52, and 54-55. The examiner notes that the date of importance in Johnson et al is October 14, 1999 and it is considered in this 103 (a) rejection via 35 USC 102(a).

5. Claims 41-42, 44-45, 46-48, 52, and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (6,336,965 B1) as evidenced by Grabley et al (WO 98/31550).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference

Art Unit: 1752

under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2). Johnson et al in Example 15 and Example 2 in the making of 2E make a printing plate that has all but the instant "polymer" of claims 41-42, 44-45. However, in the paragraph bridging col. 11-12, Johnson et al teach using a much broader group of materials for their printing plates. The references fully incorporated into Johnson et al include WO98/31550 that is Grabley et al. Grabley et al in Example 6 teach using a pigment mixed with a polyacrylate resin in the radiation absorbing layer and on page 5 other acrylate ester resins as well as (meth)acrylic acid resin are listed as binders for the radiation absorbing pigment layers used in the printing plates set forth. Since Grabley et al is completely incorporated by Johnson et al then the plates of Grabley et al wherein the modified pigments of Johnson et al are used instead of those disclosed Grabley et al make prima facie obvious applicants' printing plates of claims 41-42, 44-45 because Johnson et al teaches their use together. Wherein the pigments of Johnson et al from col. 4, line 66 to col. 6, line 4, and polymeric groups of (meth) acrylic acid polymers are used to modify the pigments, the printing plates of Johnson et al make prima facie obvious applicants' plates of claims 41-42, 44-45, 46-48, 52, and 54-55.

Art Unit: 1752

6. Applicant's arguments filed July 20, 2004 have been fully considered but they are not persuasive. Applicants argue that Johnson et al (either (WO 99/51690) or (US 6,336,965)) is improperly combined with Grabley et al because "while Johnson et al teaches various modified pigments used in printing plates and Grabley et al shows various conventional ingredients that can be used in printing plates, these are generic disclosures. No guidance is provided in these references, either alone or in combination, as to how to choose specific combinations of modified pigments and polymeric resins or binders. The examiner responds that the motivation to use the conventional additives of Grabley et al in the plates and with the pigments of Johnson et al is given by Johnson et al. As shown below the passage in Grabley et al used for support is drawn to the same radiation absorptive plate set forth by Johnson et al. The passage of importance from Grabley et al is as follows:

The IR-absorbing layer contains components, in particular pigments or dyes, which absorb laser radiation having a wavelength in the infrared range (especially in the range from 700 to 1200 nm). Here, the pigments are also to include carbon black. Suitable IR absorbers are mentioned in J. Fabian et al., Chem. Rev. 92 (1992) 1197. Pigments which contain metals, metal oxides, metal sulphides, metal carbides or similar metal compounds are also suitable. Finely divided metallic elements of main groups II to V and of subgroups I, II and IV to VIII of the Periodic Table, such as Mg, Al, Bi, Sn, In, Zn, Ti, Cr, Mo, W, Co, Ir, Ni, Pd, Pt, Cu, Ag, Au, Zr or Te, are preferred. Other suitable IR-absorbing components are metal-phthalocyanine compounds, anthraquinones, polythiophenes, polyanilines, polyacetylenes, polyphenylenes, polyphenylene sulphides and polypyrroles. In order to avoid unnecessarily impairing the resolution, the absorbing pigment particles should have a mean diameter of, as far as possible, not more than 30 μm . The amount of the IR-absorbing component is in general from 2 to 80% by weight, preferably from 5 to 57% by weight, based in each case on

SUBSTITUTE SHEET (RULE 26)

WO 98/31550

PCT/EP98/00146

5

the total weight of the nonvolatile components of the layer. The IR-absorbing layer furthermore contains at least one polymeric, organic binder. Binders which undergo spontaneous decomposition under the action of heat are particularly advantageous. These binders undergoing autoxidation include in particular nitro-cellulose. Polymers which do not undergo autoxidation and which undergo thermally induced decomposition indirectly with the formation of gaseous or volatile cleavage products may also be used. Examples of these are ethylcellulose, (meth)acrylate polymers and copolymers (such as poly(methyl methacrylate), poly(butyl acrylate), poly(2-hydroxyethyl methacrylate), copolymers of lauryl acrylate and methacrylic acid, polystyrene, poly(methylstyrene), copolymers of vinyl chloride and vinyl acetate, polyurethanes, polycarbonates and polysulphones. The directly or indirectly thermally decomposable polymers are not required in every case, so that other film-forming polymers may also be used. This applies when the IR-absorbing component already forms sufficiently volatile products under irradiation. For example, carbon black undergoes combustion when IR laser radiation strikes it, and accordingly gives gaseous combustion products. The "other film-forming polymers" are in particular homo- and copolymers containing units of (meth)acrylic acid, (meth)acrylates and/or (meth)acrylamides, as well as polyvinyl acetates and polyvinyl acetals, which, if appropriate, are furthermore modified with carboxyl groups. They are used either in combination with the thermally decomposable materials or alone. The amount of the binders is in general from about 20 to 95% by weight, preferably from 30 to 80% by weight, based in each case on the total weight of the nonvolatile components of the layer.

Thus, clear motivation was given by Johnson et al to use the additives set forth by Grabley et al. The additives in Grabley et al pointed to by the examiner were specific to IR absorbing layers. Applicants point to paragraphs [0071 and 0073] in their specification. There has been no showing that the specific polymers of (meth) acrylic acid offer any unexpected properties over the list cited by Grabley et al. The following paragraphs [0071-0074] from the instant specification are as follows:

[0071] While not wishing to be bound by any particular theory, it is believed that the modified pigment products described above interact with the polymeric resin or binder, in particular, phenolic polymers, in such a way as to strengthen the hydrogen bonding network of the polymer. This network makes the phenolic polymer insoluble in, for example, aqueous alkaline developing solutions. However, upon irradiation, the hydrogen bonding network is disrupted, enabling at least a portion of the irradiation regions to become soluble in an aqueous alkaline solution. Thus, the modified pigment products act as dissolution inhibitors as well as photothermal agents.

[0072] The printing plates of the present invention can be prepared using any method known to those skilled in the art. The modified pigment products described above can be incorporated into the optional polymeric resins or binders using any standard blending technique, including, for example, solvent casting. The modified pigment products can be incorporated either as predispersions in a solvent (aqueous or non-aqueous) as well as in a dried or partially dried powdered state.

[0073] A particular advantage of the plates of the present invention is that the modified pigment products can also be designed so as to undergo a chemical transformation upon irradiation. Thus, for example, it is possible to choose an organic group and/or amphiphilic counterion that initially interacts with the hydrogen bonding network of the polymeric resin or binder, in particular a phenolic polymer, and further, upon irradiation, undergoes a chemical transformation which reduces its ability to interact with this hydrogen bonding network. As a further example, a modified pigment product can be prepared in which the organic group undergoes a chemical transformation upon irradiation from ionic to neutral, thus changing the wetting properties of the irradiated regions of the printing plate. As an additional example, a modified pigment product can be prepared in which, upon irradiation, the organic group undergoes a chemical reaction with other components in the radiation absorbing layer, such as the polymer, thus changing the developability of the layer in such a way that the irradiated regions are no longer developable in an alkali solution.

[0074] The present invention also relates to a method of imaging a printing plate comprising a radiation-absorptive layer which comprises an optional polymer and at least one modified pigment product which involves selectively exposing the plate to a laser output in a pattern representing an image. The irradiation is done to selectively remove or chemically modify at least a portion of the radiation-absorptive layer that defines the pattern. This method may further involve the development of the irradiated plate using a solvent that is capable of removing portions of the imaged layer(s) defining the pattern. A preferred development solution is an aqueous alkaline solution. For other types of polymeric resins, a developing solution may not be needed. For example, irradiation of the plates of the present invention can also lead to a chemical change from, for example, hydrophobic to hydrophilic, thus producing a plate which has regions that would interact differently with an ink.

It is noted applicants did not wish to be bound by this theory set forth and that the polymer of particular desirability was the phenolic polymer. The examiner does not see sufficient evidence

Art Unit: 1752

given to remove the prima facie obvious combination of Johnson et al and Grabley et al by this "theory" with respect to the use of (meth)acrylic acid polymers with the pigments of Johnson et al as binders for radiation absorptive layers. The rejections stand.

7. Claims 23-24, 27-42, 44-48, 50-52, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (WO 99/51690) in view of Van Damme et al (EP 0 803 771 A2). Johnson et al disclose in SUMMARY OF THE INVENTION that they have provided modified pigment products which are capable of improving the dispersibility and dispersion stability of the pigment in compositions and formulations including those used to manufacture lithographic printing plates such as infrared or near-infrared laser imageable printing plates. The carbon blacks are among those adapted by Johnson et al. Johnson et al prefers nonionic groups on their modified pigments but make clear on page 4, lines 17-35, that the non-ionic groups include carboxylates, sulfonates, phosphates, amines or other groups that typically demonstrate an ionic nature in water. These non ionic groups are "ionizable" groups in water and thus read on the instant "ionizable" groups. Van Damme et al which is cited by Johnson et al on pages 13-14 teach the formation of thermosensitive layers wherein phenolic resins are mixed with pigments like carbon black to form laser imageable layers that become soluble or swellable in aqueous medium. Such resins are inclusive of novolaks which are phenol-formaldehyde polymers, polyvinyl phenols which are polyvinyl hydroxystyrene and polyacrylic acids. With respect to instant claims 23-24, 27-42, 44-48, 50-52, 55, the use of the modified carbon black pigments of Johnson et al in the plates of Van Damme et al would have been obvious to obtain a more stable dispersion of pigment. In Van Damme et al, see particularly Abstract, page 3, lines 35-page 4, lines 20, page 5, lines 10-22.

Art Unit: 1752

8. Claims 23-24, 27-42, 44-48, 50-52, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (6,336,965 B1) in view of Van Damme et al (EP 0 803 771 A2). The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).). Johnson et al disclose in SUMMARY OF THE INVENTION that they have provided modified pigment products which are capable of improving the dispersibility and dispersion stability of the pigment in compositions and formulations including those used to manufacture lithographic printing plates such as infrared or near-infrared laser imageable printing plates. The carbon blacks are among those adapted by Johnson et al. Van Damme et al which is cited by Johnson et al in the paragraph bridging col. 11-12 teach the formation of

Art Unit: 1752

thermosensitive layers wherein phenolic resins are mixed with pigments like carbon black to form laser imageable layers that become soluble or swellable in aqueous medium. Such resins are inclusive of novolaks which are phenol-formaldehyde polymers, polyvinyl phenols which are polyvinyl hydroxystyrene and polyacrylic acids. Johnson et al prefers nonionic groups on their modified pigments but make clear that the non-ionic groups include carboxylates, sulfonates, phosphates, amines or other groups that typically demonstrate an ionic nature in water. With respect to instant claims 23-24, 27-42, 44-48, 50-52, and 55, the use of the modified carbon black pigments of Johnson et al in the plates of Van Damme et al would have been obvious to obtain a more stable dispersion of pigment. . In Van Damme et al, see particularly Abstract, page 3, lines 35-page 4, lines 20, page 5, lines 10-22.

9. Applicant's arguments filed July 20, 2004 have been fully considered but they are not persuasive. Applicants allege that the examiner has not made a prima-facie obvious rejection because there is a lack of motivation to combine the specific pigment and specific binder. The Examiner has shown where Johnson et al gives such motivation by citing Van Damme et al. With respect to instant claims 23-35 as amended, Applicants argue that Johnson et al does not disclose pigments with ionizable groups. The examiner has pointed out where such groups ionizable in water are taught in Johnson et al. With respect to instant claims 36-40, the applicant argues there is no motivation to pick the specific pigment and the phenolic resins in the rejection set forth. The examiner believes Johnson et al in pointing to Van Damme et al directly gives such motivation. With respect to claims 41-45, applicants argue that there is no motivation to combine the specific pigment with the acrylic or methacrylic acid polymer or salts thereof. Van Damme et al sets forth any hydrophilic binder for the intermediate layer or the photosensitive

Art Unit: 1752

layer can be used with their thermosensitive layer on page 3. With respect to the intermediate layer on page 4, such a binder is inclusive of homo and copolymers of (meth) acrylic acid. Thus, Van Damme et al do teach these binders as conventional with their thermosensitive layers, i.e. the layer with the carbon black in it. Applicants make the same argument with respect to claims 52-55. The rejections stand.

10. Claims 1-22 and 83-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Damme et al (EP 0 803 772 A2) or Grabley et al (WO 98/31550) in view of Adam et al (5,698,016). Van Damme et al and Grabley et al teach making the instant printing plates with the exception of using the modified pigment set forth. However, Adams et al teach using the pigment when carbon black in conventional compositions. In Adams et al see particularly col. 7, lines 55-61. With respect to instant claims 1-22 and 83-90, the use of the pigments of Adams et al as the carbon black of Van Damme et al or Grabley et al would have been prima facie obvious to enhance pigment dispersibility as set forth by Adams et al in col. 1. In Adams et al, also see col. 4, 6, and 8. The examiner notes “[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the ‘subject matter as a whole’ which should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103.” In re Spinnoble, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). However, “discovery of the cause of a problem . . . does not always result in a patentable invention. . . . [A] different situation exists where the solution is obvious from prior art which contains the same solution for a similar problem.” In re Wiseman, 596 F.2d 1019, 1022, 201 USPQ 658, 661 (CCPA 1979) (emphasis in original). The examiner believes it is the In re Wiseman application that applies in this combination of

Art Unit: 1752

references. Adams et al is directed to the improvement of carbon blacks with respect to dispersion stability. Their approach is taught for all coatings using carbon black generally. Thus the solution is obvious from the prior art which contains the same solution for a similar problem. The rejection stands with respect to claims 1-22 and 83-90.

1. Applicant's arguments filed July 20, 2004 have been fully considered but they are not persuasive. Applicants argue that Adams is not directed to printing plates and polymers used therein with carbon black. The examiner notes that claims 1-15 and 21-22 and 83-86 have no requirement for an additional polymer at all. With respect to Claims 1-22 and 83-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Damme et al (EP 0 803 772 A2) or Grabley et al (WO 98/31550) in view of Adam et al (5,698,016), Applicants have argued that Adams et al do not disclose using their modified pigments in printing plates while Grabley et al and Van Damme et al do not teach using the modifications of Adams in their pigments. Thus, there is insufficient reason to combine these references. The examiner believes that the problem to be solved in the instant application as set forth in [0011] in the instant application, i.e. "there is a need for printing plates comprising pigments such as carbon black with improved dispersibility in polymer used to produce printing plates", is a problem well understood in the art of dispersing carbon black and that Adams et al addresses that problem of dispersability in coatings with the same solution as applicants. The examiner believes solution is obvious from the prior art which contains the same solution for a similar problem, i.e. dispersibility of carbon black in a carrier or liquid vehicle. Adams et al in col. 6, lines 36-51 address increased water dispersibility of the modified carbon products and hydrophobic dispersibility in col. 7, lines 14-36. Adams et al also address using composition wherein resins are used as conventional coating

additives in col. 8, lines 21-57 wherein acrylic resins are specifically considered. Adams et al in Examples 18a -18 n are made by dispersing their modified carbon black with acrylate polymers. Thus, the examiner believes the rejection is properly made and repeats it.

2. Claims 74, 76 and 79 and 81-82 are rejected under 35 U.S.C. 102(b) as being anticipated by Sypek et al (5,286,594). In Sypek et al, see particularly the Abstract, co. 1, lines 26-47, Summary of the Invention, col. 4, lines 40- end of col. 5, col. 6, lines 26-45, col. 7, lines 36-56 and Example 1 (57-760002 chip coated with an acrylamide substituted cellulose ester, and mixed in with an acrylamide substituted cellulose ester), Example 2 wherein 79R27C chip is the pigment coated with polyvinylbutyral polymer and is mixed with a cellulose polymer and Example 9 wherein chip 79R84C is used as encapsulated pigment coated with an acrylated polyurethane, i.e. an acrylic polymer, and polyvinylbutyral polymer encasing perylene maroon pigment, and claims. The pigment of Sypek et al is radiation absorptive inherently as evidenced by its being used to produce an color in the lithographic printing plates made. These example plates of Sypek et al anticipate the plates of instant claims 74, 76 and 79 and 81-82 wherein the chips are inherently possessed of coatings that are not extractable by an organic solvent. The coated pigments of Sypek et al are held to be modified pigment products. There is no limit on the modification other than polymer partially or fully coat a pigment and that the polymeric coating is not substantially extractable by an organic solvent.

11. Applicant's arguments filed July 20, 2004 have been fully considered but they are not persuasive. Applicants argue that the pigments of Sypek et al are extractable with a solvent but presents no evidence to show the specific modified pigments are extractable with a solvent. The

element of example 2 and example 9 of Sypek et al are those held inherently the same as the instant claims in question. The rejection stands.

3. Claims 91-110 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in Papers filed October 23, 2003 and January 30, 2003.

12. This application contains claims 91-110 drawn to an invention nonelected with traverse in Papers filed October 23, 2003 and January 30, 2003. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

13. Claims 56-73 are allowed.

14. Claims 75, 77-78, 80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1752

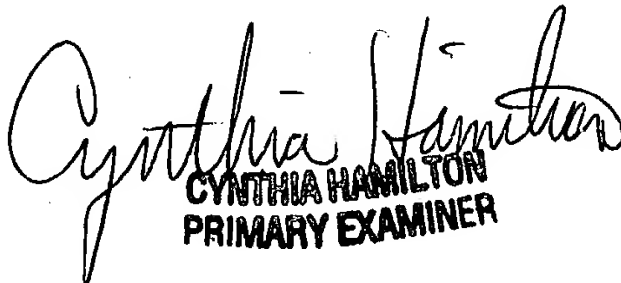
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday through Friday 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 4, 2004


CYNTHIA HAMILTON
PRIMARY EXAMINER

Cynthia Hamilton
Primary Examiner
Art Unit 1752